

DRYMARIA VISCOSA (CARYOPHYLLACEAE):
CORRECT AUTHOR CITATION AND
RANGE EXTENSION TO THE UNITED STATES

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Although cited as *Drymaria viscosa* S. Wats. ex Orc. in both monographs of the genus (Wiggins, 1944; Duke, 1961) and *Index Kewensis* (Durand & Jackson, 1906), the species was neither described by Orcutt nor ascribed to Watson by him. In a narrative of his trip to Baja California, Mexico, Orcutt (1886) merely mentioned the name, creating a *nomen nudum*: "At Socorro we found a few lichens, shells, a young palm tree, and various nice plants of which I will mention *Dalea Seemannii*, *Nemacaulis nuttallii* and a variety, *Aesculus Parryi*, *Euphorbia micromera*, *drymaria* (sic) *viscosa*, n. sp., *Astragalus hornii*, *A. menziesii*, . . . etc."

The specimen collected by Orcutt at "Socono" (Socorro, the handwritten label is easily misread), and cited by Watson (1887:469) with his description of the species, represents the holotype ("C. R. Orcutt, April, 1886" = *Orcutt 1330*, GH!). With regard to *D. viscosa*, Watson makes no other reference to Orcutt. While it is likely that Watson knowingly used and legitimized Orcutt's name for the new plant, he did not give Orcutt credit for the name. Furthermore, because the plant bears an indument of glandular trichomes to which grains of sand adhere, it is equally possible that Watson arrived independently at the epithet *viscosa*.

Articles 46 of the International Code of Botanical Nomenclature (Voss et al., 1983) states that ". . . it is necessary to cite the name of the author(s) who first validly published the name concerned . . ." This is followed by Recommendation 46E.1. which explains that where an author has validly published a name and ascribed it to another person, "the name of the other person, followed by the word *ex*, may be inserted *before* the name of the publishing author, if desired" (italics ours).

Thus Watson is the author who validly published *Drymaria viscosa* and must be cited. Had Watson ascribed the name to Orcutt, *D. viscosa* Orc. ex S. Wats. would have been the correct option, though opposite the order of authors cited in the monographs (Wiggins, 1944; Duke, 1961) and *Index Kewensis* (Durand & Jackson, 1906). However, because neither Watson nor

Orcutt ascribed *D. viscosa* to the other author, the use of the connector "ex" between their names in either combination is clearly incorrect. As cited in Shreve and Wiggins (1964) and Wiggins (1980) and as suggested in the *Gray Herbarium Card Index* (Harvard University, 1968), but contrary to the monographs, *Drymaria viscosa* S. Wats. is correct and *Drymaria viscosa* Orc. remains a nomen nudum.

DISTRIBUTION

Wiggins (1980) considered *D. viscosa* as endemic to Baja California, occurring in sandy areas from San Quintín to the Cape region. However, Felger (1980) reported the species from the Gran Desierto of northwestern Sonora and there is in CAS a specimen from Sonora collected in 1966 (Ripley 14226). These specimens and others represent a mainland distribution from the region of the Pinacate Lava Flow in Sonora southward along the coast of Sonora nearly to Guaymas.

MEXICO. SONORA: Dunes ca 5 mi NE of Sierra del Rosario, 32°08'N 114°09'W, Felger 20430 *et al.* (ARIZ); Sand desert N of Sierra Pinacate, 0.5 mi S of the San Luis—Sonoita road, Mason 1832 *et al.* (ARIZ); Moon Crater (Cratero Chichi), SW part of the Pinacate region, Felger 19239 (ARIZ); ca 1 mi S of Moon Crater, 31.7°N 113.6°W, Felger 19095 & Hanson (ARIZ); ca 6 mi S of Moon Crater, 31.6°N 113.6°W, Felger 19034 & deRosa (ARIZ); Dunes 0.2 km S of Hwy 8, ca 29 km SW of Sonoita, Burgess 4761 (ARIZ); 7.2 mi from cabin 245 at Choya, Burch *s.n.* (ASU); La Mancha Blanca, N side of Cerro Tepopa 29°24'N 112°24'W, Felger 20850 *et al.* (ARIZ); Sand dunes, Puerto Kino, 15 Feb 1966, Ripley 14226 (CAS); High beach dunes ca 1 mi NW of village of Tastiata, 28°20½'N 111°30½'W, Felger 20881 *et al.* (ARIZ, GH); Coastal sand dunes S of Moro (Morro) Colorado, 5 mi SSE of Estero Tastiota, Copp 70-3 (CAS).

Thus although not previously reported for the United States, the occurrence of *Drymaria viscosa* from the United States portion of the Pinacate region is not as unusual as Wiggins' (1980) report of endemism in Baja California would suggest. One specimen is now known from the U.S.A.: Arizona, Yuma Co., eastern edge of the Pinacate Lava Flow, along the Camino del Diablo, Cabeza Prieta Game Range, occasional on sand dunes with *Triteliopsis palmeri*, ca 900 ft elev., 17 Apr 1983, Hodgson 2080 & Engard (DES).

This species may be distinguished from other Arizona species of *Drymaria* by its occurrence below 1000 ft elev.; the others occur above 4000 ft (Kearney & Peebles, 1960). Because the leaves are several per node it most strongly resembles, and keys with, *D. molluginea* (Lagasca) Didr. but is heavily glandular pubescent with smooth, tan seeds.

REFERENCES

- DUKE, J. A. 1961. Preliminary revision of the genus *Drymaria*. Ann. Missouri Bot. Gard. 48:173-268.

- DURAND, T. & B. D. JACKSON. 1906. *Index kewensis*. Supplement I. Clarendon Press, Oxford.
- FELGER, R. S. 1980. Vegetation and flora of the Gran Desierto. *Desert Plants* 2:87–114.
- HARVARD UNIVERSITY. 1968. *Gray herbarium index*. vol. 4. G. K. Hall and Co., Boston Massachusetts.
- KEARNEY, T. H. & R. H. PEEBLES. 1960. *Arizona flora*. 2nd edition with supplement by J. T. Howell & E. McClintock. University of California Press, Berkeley.
- ORCUTT, C. R. 1886. A botanical trip. *West Amer. Sci.* 2:53–58.
- SHREVE, F. & I. L. WIGGINS. 1964. *Vegetation and flora of the Sonoran Desert*, vol. 1. Stanford University Press, Stanford, California.
- VOSS, E. G., ET AL., eds. 1983. *International code of botanical nomenclature*. *Regnum Veg.* 111:i-xv + 1–472.
- WATSON, S. 1887. Descriptions of some new species of plants. *Proc. Amer. Acad. Arts.* 22:466–481.
- WIGGINS, I. L. 1944. The genus *Drymaria* in and adjacent to the Sonoran Desert. *Proc. Calif. Acad. Sci.* 25:189–214.
- . 1980. *Flora of Baja California*. Stanford University Press, Stanford, California.